# Governor's Prevention Advisory Council Evidence-based Prevention Workgroup Phase 1 Final Report

California's Governor's Prevention Advisory Council Members' Evidence-based Practices: A Review of Current Status & Recommendations for Next Steps

July 2008 Modified July 2010



Prepared by Christina Borbely, PhD on behalf of the Center for Applied Research Solutions

#### Introduction

The standard of relying on proven methods to achieve targeted goals is common place across multiple disciplines. While well established in some fields (i.e. medicine), it is a sign of evolution in others (e.g. public health or social services). Within the AOD-related fields of treatment, prevention, mental health and mental health services, use of proven methods is the norm. What constitutes "proof" of effectiveness in policy, programs and practice, however, varies considerably.

Terms frequently associated with "proven methods" of effective prevention are: *Evidence-based:* To be grounded in clearly articulated and empirically-supported theory with detailed description of what outcomes were produced in what populations with what intervention and including measurable outcomes assessed with psychometrically strong measures (including long-term follow-ups) that are tested in a scientifically-sound way with comparison conditions, optimally through randomized, controlled studies.<sup>1</sup>

Research-based: To be developed as part of research studies; focused on demonstrating that youth participating in programs, over time, have better outcomes than those who did not.

*Science-based:* To be empirically evaluated using experimental design trial involving random assignment and use of multi-informant, multi-method measurement procedures at pretest, posttest, and follow-up data collections.<sup>2</sup>

There is nuanced distinction between terms, but also broad interpretation and application of each individual concept. This frequently contributes to conflict, redundancy, and, too often, arbitrary use of standards within the field. It is problematic for California's county and local providers and policymakers attempting to maintain current understanding of expectations, standards or requirements. Overall, the lack of clarity stymies progress toward achieving optimal benefits for individuals and communities facing the impact of ATOD issues.

#### Method

The purpose of the assessment was to identify use of "evidence-based" standards or criteria policy, programs or services provided or funded by the 15 GPAC members. In general, "evidence-based" refers to:

Use of programs or strategies scientifically proven to be effective in achieving desired reductions in or risk of designated behaviors (e.g. ATOD use).

In the interest of inclusiveness, the review included search terms generally synonymous with "evidence-based" such as: proven, best practice, effective, research-based, data-driven, demonstrated effective, and science-based.

All GPAC members' point of contact received an email requesting relevant information and documents for review. Given limited response, the current investigation relies exclusively on information found in the public domain. GPAC member websites and any

external internet references were reviewed. The investigation primarily focused on ATOD prevention-related information. Member websites were also examined for non-ATOD domains (e.g. health) and non-prevention services (e.g. treatment).

# **Findings**

Results of the initial assessment yielded some insight into the status of evidence-based practices within California's primary agencies addressing ATOD issues.

- 3 of 15 members provide explicit definitions or standards of criteria for use of evidence-based programs or practice.
- 5 of 15 (33%) included no reference to or information about "evidence" used to select or define programs or practice.
- Remainder of members (almost 50%) provided information ranging from minimal or insinuated EBP (e.g. practices that were proven to work in other communities were adopted) to somewhat substantiated (e.g. single reference to "research" without explanation).

*Identified terms* related to "evidence-based" programs or practices criteria were:

- "[programs] be based on scientifically based research demonstrating that the program to be used will reduce violence and illegal drug use."
- "research materials on innovative youth programs" and "routine evaluations to assess progress, and to refine, improve and strengthen program effectiveness."
- "use of evidence-based programs"
- "training, training standards, and learning objectives recommendations provided in this pamphlet are considered Best Practices as based on published research conducted by experts in the field..."
- "[experts] provide cutting-edge prevention programs, develop crime and violence prevention policies, advocate for proven strategies, offer training in effective prevention strategies..."
- "assessment of effectiveness...use of effective methods."

# EBP in GPAC members' funding mechanisms

Information on grant requirements was available for four GPAC agencies. Requirements or recommendations related to applicant/grantee use of evidence-based programs/strategies appeared in all four agencies. The parameters for "meeting the standard" varied. For instance,

- "Include examples of results achieved as a direct result of past efforts."
- "Funded grants must implement a science-based program with fidelity. Researchbased supplementary activities and innovative supplementary programs may also be included."
- "Science-based programs (also called research-validated programs) have demonstrated a positive impact on students' health-related behaviors as verified by empirical methods and rigorous data analyses that have been published in scholarly, peer-reviewed journals (or reviewed by a duly constituted panel)."
- "...potential grantees select recommended goals and "best practice" objectives that are time-tested and impact [target] problems. "

Other agencies included definitions of best practices; required use of programs or practices from credentialed "lists" of effective programs (e.g. NREPP or Colorado Blueprints); or system-wide adoption of a program deemed effective by experts (i.e. by NREPP).

#### EBP in other states:

There continues to be significant variant within and across States regarding the application of evidence-based principle driving ATOD policy and service. This assessment does not include a comprehensive review. Rather, key examples are provided for reference. Currently states such as Oregon, Georgia, Ohio, and South Carolina have done the following:

- Issue definitions for terms
- Provide criteria for standards "evidence"
- · Recommend guidelines for use of EBP
- Develop tool kits to support use of EBP
- Establish policy for majority of funding only for EBP

#### EBP in the field:

The field is currently in debate about appropriate levels of evidences to indicate effectiveness. In particular, scrutiny is given to the value (or lack of) in "lists" that deem programs or strategies "effective". Examples of such "lists" include SAMHSA's recently revised National Registry of Evidence-based Programs & Practices (NREPP) and the Center for the Study of Violence Preventions (CSVP), Blueprints. Considered a useful tool for providers by some, critics<sup>3</sup>, 4 cite lack of transparency associated with review criteria, conflicts of interest among expert review panels, and arbitrariness designations across "lists" as undermining prevention efforts.

The Society for Prevention Research recently published proposed definitions and standards for evidence of effectiveness<sup>5</sup>. Affiliated experts are calling for SAMHSA's NREPP to adopt the protocol<sup>6</sup>. The guidelines are too detailed to include here, but in summary, SPR<sup>7</sup> offers three domains for assessing the evidence associated with "proven methods":

- Efficacy: Impact Achieved in Optimal Implementation Context
  - o Consistent, long-term (>6mo post) positive outcomes
  - No serious iatrogenic effects
  - Minimum 2 rigorous trials
- Effectiveness: Impact Achieved in Real World Implementation Context
  - o Must meet efficacy & dissemination requirements and also,
  - Document meaningful positive outcomes under real-world scientific test conditions
- Dissemination: Readiness to Replicate in Real World Context
  - Manuals, appropriate training, and technical support

#### **Discussion**

Review of public domain sources for information regarding California GPAC members' use of evidence-based policy, programs and practice demonstrates wide variations in approach and sophistication. While some agencies do not integrate the concept into their literature; others provide cohesive articulation of standards.

Findings from the current review suggest the most common method for incorporating "evidence-based" as a principle is by referencing the term or analogous terms. The majority of such references do not include definitions or explicit standards for evidence of effectiveness. There is lack of unity within GPAC as well as inconsistency at the county and local levels. California leaders are poised to provide instrumental clarification to local providers and policy makers regarding use of effective methods.

# Next Steps:

- Complete Phase II assessment of GPAC including internal documents and interviews.
- Review options for statewide model of EBP for California

#### Recommendations:

- Confirm GPAC member commitment to advocacy and use of "proven methods" for effective prevention.
- Use consistent terminology, inclusive of meaningful definitions, across agencies.
- Integrate terminology into GPAC agency literature (i.e. public domain)
- Establish committee to identify recommended standards/criteria of "evidence" substantiating effective methods.
- Develop guidelines for agencies addressing California's ATOD issues.

## References

\_\_\_\_\_

<sup>&</sup>lt;sup>1</sup> Spoth, R. (2004). Pioneering partnerships for tested, health-promoting programs: Toward enhanced core funding and accountability (Submitted to *Journal of Extension*).

<sup>&</sup>lt;sup>2</sup> Flay, Biglan, Boruch, Castro, Gottfredson, Kellanm, Moscicki, Schinke, Valentine, Ji, (2005), Standards of Evidence: Criteria for Efficacy, Effectiveness and Dissemination. *Prevention Science*.

<sup>&</sup>lt;sup>3</sup> Petrosino, A. (2003). Standards for Evidence and Evidence for Standards: The Case of School-based Drug Prevention. *The ANNALS of the American Academy of Political and Social Science* (587), p. 180.

<sup>&</sup>lt;sup>4</sup> Hallfors, Pankrantz, Hartford (2007). Does Federal Policy Support the Use of Scientific Evidence in School-based Prevention Programs? *Prevention Science*.

<sup>&</sup>lt;sup>5</sup> Flay, Biglan, Boruch, Castro, Gottfredson, Kellanm, Moscicki, Schinke, Valentine, Ji, (2005), Standards of Evidence: Criteria for Efficacy, Effectiveness and Dissemination. *Prevention Science.* 

<sup>&</sup>lt;sup>6</sup> Hallfors, Pankrantz, Hartford (2007). Does Federal Policy Support the Use of Scientific Evidence in School-based Prevention Programs? *Prevention Science*.

<sup>&</sup>lt;sup>7</sup> Flay, Biglan, Boruch, Castro, Gottfredson, Kellanm, Moscicki, Schinke, Valentine, Ji, (2005), Standards of Evidence: Criteria for Efficacy, Effectiveness and Dissemination. *Prevention Science.*